



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/580,665	05/26/2000	Ian Crayford	34729/JFO/B600	8203

32294 7590 07/12/2004

SQUIRE, SANDERS & DEMPSEY L.L.P.
14TH FLOOR
8000 TOWERS CRESCENT
TYSONS CORNER, VA 22182

EXAMINER

BAROT, BHARAT

ART UNIT

PAPER NUMBER

2155

DATE MAILED: 07/12/2004

14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/580,665

Applicant(s)

CRAYFORD ET AL.

Examiner

Bharat N Barot

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

RESPONSE TO REQUEST FOR RECONSIDERATION

1. Claims 1-40 remain for further examination.

The new grounds of rejection

2. Applicants' arguments with respect to claims 1-40 filed on April 28, 2004 (Paper Number 13) have been fully considered but they are deemed to be moot in view of the new grounds of rejection.

Drawings

3. This application has been filed with informal drawings, which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Claim Rejections - 35 USC § 112

4. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 contains the "status information", which is unclear about the status of server, client, or network.

Other dependent claims, which are not specifically cited above are also rejected because of the deficiencies of their respective parent claims.

In response to applicant's argument that the recitation of status information is not indefinite simply because it would cover multiple types of status information, it is noted that the features upon which applicant relies (i.e., the status information may be information about the network or hub or server itself) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-14 and 21-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kristol et al (U.S. Patent No. 5,541,927) in view of Montulli (U.S. Patent No. 5,774,670).

7. As to claim 1, Kristol et al disclose a network hub in a communication network comprising a server, the server (source) pushing status packet to a client (destination) (figures 3-6; and column 4 line 31 to column 6 line 19).

However, Kristol et al do not explicitly disclose that the server pushing status information to a client.

Montulli explicitly disclose a network hub in a communication network comprising a server (figures 1A and 1B; and column 4 line 16 to column 5 line10), the server pushing status (read as state) information to a client (see abstract; figure 4; column 1 lines 6-11; column 2 lines 14-55; and column 7 lines 10-44).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Montulli as stated above with the network hub of Kristol et al for pushing status information to a client because it would have increased the transmission efficiency and processing speed to improved the network latency.

8. As to claims 2-5, Kristol et al disclose that the server unicasts the information transmits the information to a plurality of clients, broadcasts the information, and multicasts the information (column 3 lines 53-59).

9. As to claims 6-7, Kristol et al disclose that the hub comprises one of a switch, a repeater, a bridge, a router, a gateway, and a hybrid thereof (figure 3; and column 4 lines 31-49); and the network hub comprises one of an OSI Layer 2 network switch, an OSI Layer 3 network switch, and a hybrid thereof (figure 2; and column 3 lines 24-52). Note: Applicant claimed that the hub comprises one of the network elements or layers; therefore, the rejection of claims 6-7 is proper.

10. As to claim 8, Kristol et al disclose that the hub is devoid of a microprocessor (column 3 lines 38-42).

11. As to claims 9-10, Kristol et al disclose that the information comprises a predefined status field; and the predefined status field comprises a push transmission field (figure 6; and column 6 lines 14-19). Montulli also disclose that information comprises a predefined status field; and the predefined status field comprises a push transmission field (column 13 lines 38-47 and 51-55; column 14 lines 19-27; and column 16 lines 1-10).

12. As to claims 11-13, Kristol et al disclose that the hub further comprising a plurality of ports; the operational information comprises a predefined status field; and the predefined status field corresponds to at least one of the plurality of ports (figures 3-4 and 6; column 4 line 31 to column 5 line 12; and column 6 lines 14-19).

13. As to claim 14, Kristol et al disclose that the hub further comprising memory register for storing the information therein (column 7 lines 33-67).

14. As to claim 21-22, above remarks rejecting claim 1 equally apply here, additionally Montulli disclose a communication apparatus (figures 1A and 1B; and column 4 line 16 to column 5 line10), comprising: a network information table storing network information from the network information receiver; a network information transmitter selectively push transmitting the network information in the network information table; a network information receiver, operably coupled with a communication network and the network information table, receiving network information; and a network operations analyzer analyzing the networking information in the network information table and producing information of a state of the network (see abstract; figures 1A-1B and 4; column 2 lines 14-55; column 4 line 16 to column 5 line10; and column 7 lines 10-66).

15. As to claim 23-26, Kristol et al disclose that the apparatus comprising a hub, a switch, a repeater, a bridge, a router, a gateway, and a hybrid thereof; comprising a plurality of ports coupled to the network information transmitter; and comprising one of an OSI Layer 2 network switch, an OSI Layer 3 network switch, and a hybrid thereof (figures 2-4; column 3 lines 24-52; and column 4 line 31 to column 5 line 12).

16. As to claims 27-28, it would have been obvious matter of design choice to select the number of poarts coupled to the network information transmitter for increased the utilization of the communication apparatus.

17. As to claim 29-30, Kristol et al disclose that the apparatus further comprising a PHY and a switching interface, each of the network information receiver, the network information table, and the at least one of the network information transmitter and the network information detector being integrated into the network hub; and the network hub comprises one of a switch, a repeater, a bridge, a router, a gateway, and a hybrid thereof (figures 3-4 and 6; column 4 line 31 to column 6 line 2; and column 6 line 14 to column 7 line 67).

18. As to claims 31-40, they are also rejected for the same reasons set forth to rejecting claims 21-30 above.

19. Claims 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kristol et al (U.S. Patent No. 5,541,927) in view of Montulli (U.S. Patent No. 5,774,670) as applied to claims 1 and 9 above, and further in view of Fujino et al (U.S. Patent No. 5,651,006)

20. As to claims 15-20, neither Kristol et al nor Watson et al disclose that the information is a management information base (MIB) statistic.

Fujino et al disclose that the information is a management information base (MIB) statistic; and further comprising a MIB engine, a switching fabric and a transceiver (PHY) integrally contained therein, an address resolution table integrally contained therein, and a MIB engine for pushing the predefined status field (abstract; figure 2; column 3 lines 19-23 and 39-43; column 6 lines 5-34; column 7 lines 1-53; and column 22 lines 18-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Fujino et al as stated above with the network hub of Kristol et al for pushing status information to a client because it would have provided economically efficient, secure, and balanced communication between source device and destination device.

Contact Information

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bharat Barot whose telephone number is (703) 305-4092. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alam, Hosain, can be reached at (703) 308-6662. A central official fax number is (703) 872-9306.

Any inquiry of general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 305-3900.

Bharat Barot.
BHARAT BAROT
PRIMARY EXAMINER

Patent Examiner Bharat Barot

Art Unit 2155

June 29, 2004